



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,956	11/13/2001	Manuel Barbosa	11017-0006	6385
22902	7590	06/23/2005	EXAMINER	
CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005			NGUYEN, XUAN LAN T	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,956	Applicant(s) BARBOSA, MANUEL	
	Examiner Lan Nguyen	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 March 2005 is: a) ☐ approved b) ☒ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input checked="" type="checkbox"/> Other: <u>drawings</u> |

hll

DETAILED ACTION

Drawings

1. The proposed two sheets of figure 2, submitted on 3/28/05, are not approved because the faxed copies are of poor quality; and the proposed changes are very hard to see.
2. It is noted that Applicant again did not respond to the drawing objections stated in the Office Actions dated 5/6/03 and 12/24/03.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3683

5. Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 12 recites the limitation "said attaching element". There is insufficient antecedent basis for this limitation in the claim. Perhaps Applicant intends for claim 12 to depend from claim 11; since "an attaching element" is recited therein. To advance prosecution, claim 12 is being treated as being depending from claim 11.
- Claim 14 is an exact duplicate of claim 12; and should be cancelled.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller et al. in view of Yamamoto.

Re: claims 1, 11 and 12, Spiller et al. show a dual leading-shoe brake system, as in the present invention, comprising: a backing plate 10; first and second actuating levers 51, 51 arranged for radial moment and first and second brake shoes B, B; each brake shoe engaging a respective one of said actuating levers such that said actuating levers urge said brake shoes radially outward during braking operation, as shown in

Art Unit: 3683

figure 1, a first anchor fixed to said backing plate and presenting opposing faces, each engaging respective first ends of said actuating levers and adapted to engage a first end of a said brake shoe during braking while permitting vertical movement of said brake shoes, a second anchor 16 adapted to engage a second end of said a brake shoe during braking, and an activating element C engaging second ends of said levers and adapted to urge said levers apart during braking, see page 4, first column, lines 6-16 and 63-72. Spiller's brake system lacks a first anchor fixed to said backing plate and presenting opposing faces, each engaging respective first ends of said actuating levers and adapted to engage a first end of a said brake shoe during braking while permitting vertical movement of said brake shoes. Yamamoto teaches a first anchor 20, as a block, for the webs 62, 52 wherein said first anchor is secured to the backing plate by rivets, as shown in figure 1, said anchor comprises opposing faces, each engaging respective first ends of webs 62, 52. Yamamoto also shows the ends of webs 52, 62 being permitted for vertical movements since the spring 34 is securing the ends but at the same time allowing play in the connection between the ends of webs 52, 62 and block 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system to have one common block as a first anchor in order to simplify the design at the same time reducing the cost of making the brake system as taught by Yamamoto.

Re: claims 2 and 3, Spiller's brake system, as rejected in claim 1, lacks an adjuster of variable length and a parking brake lever as claimed in claims 2 and 3. Yamamoto teaches an automatic adjuster link of variable length 88, 26 and a parking

brake lever 30 pivotally attached to a web 62 of shoe 18 and engaging said adjuster such that pivotal motion of said parking brake lever applies a separating force to said adjuster and to said web 62 as described in the Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Spiller's brake system with an automatic adjuster link of variable length and a parking brake lever such as taught by Yamamoto in order to automatically adjusting the brake shoes according to brake lining wear levels and to utilize the same brake system as a service brake and a parking brake. Since automatically adjusting the shoes would increase the effectiveness of the brake system and saving time for the driver from having to manually adjusting said shoes; and utilizing the same service brake system as a parking brake would save the cost of making a vehicle. Furthermore, Yamamoto's adjuster and parking brake lever work together so that when the parking brake lever is actuated, the adjuster is actuated at the same time to adjust for brake wear, which adds even more convenience to the driver.

Re: claim 4, Spiller further shows first and second pins 79, 79, each of said pins connecting a respective one of said first and second levers to a respective one of said first and second brake shoes.

Re: claim 5, Spiller et al. show a brake system, as in the present invention, comprising: first and second actuating levers 51, 51 arranged for radial movement to actuate respective brake shoes B, B. Spiller lacks an adjustable link extending between respective ends of said levers, and a parking brake lever pivotally attached to one of said actuating levers at a pivotal connection and also engaging one end of said link

Art Unit: 3683

such that pivotal movement of said parking brake lever applies a force to said one of said actuating levers through said pivot connection and to the other of said actuating levers through said link. Yamamoto teaches an automatic adjuster link of variable length 88, 26 and a parking brake lever 30 pivotally attached to a web 62 of shoe 18 and engaging said adjuster such that pivotal motion of said parking brake lever applies a separating force to said adjuster to web 52 and another force to said web 62 by the pivotal connection 66 as described in the Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system with an automatic adjuster link of variable length and a parking brake lever such as taught by Yamamoto in order to automatically adjusting the brake shoes according to brake lining wear levels and to utilize the same brake system as a service brake and a parking brake. Since automatically adjusting the shoes would increase the effectiveness of the brake system and saving time for the driver from having to manually adjusting said shoes; and utilizing the same service brake system as a parking brake would save the cost of making a vehicle. Furthermore, Yamamoto's adjuster and parking brake lever work together so that when the parking brake lever is actuated, the adjuster is actuated at the same time to adjust for brake wear, which adds even more convenience to the driver.

Re: claims 7 and 10, Spiller et al. show a dual leading-shoe drum brake system, as in the present invention, comprising: a backing plate 10; an upper anchor 16 secured to an upper part of said backing plate; a lower anchor 15 secured to a lower part of said backing plate; first and second 51, 51 substantially identical actuating levers arranged

Art Unit: 3683

symmetrically with respect to a line between said upper and lower anchors for radial movement and engaging said lower anchor, as shown in figure 1; first and second B, B substantially identical brake shoes, each of said brake shoes being connected and located adjacent a respective one of said actuating levers and adapted to be activated by said lever; wherein said brake shoes selectively engage said upper and lower anchors to transfer braking forces during braking, see page 4, first column, lines 6-16 and 63-72; and an actuating cylinder C engaging upper ends of said actuating levers to urge said levers apart and initiate said braking, an adjustment link 97, 98 extending between said first and second actuating levers, and . Spiller's brake system lacks a parking brake lever as claimed. Yamamoto teaches a parking brake lever 30 pivotally attached to a web 62 of shoe 18 to utilize the same brake system for both service braking and parking braking. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system with a parking brake lever such as taught by Yamamoto in order to utilize the same brake system as a service brake and a parking brake in order to save the cost of making a vehicle as compared to having separate service and parking brake systems. As modified, Spiller's parking brake lever would engage the adjustment link 97, 98 via the actuating lever 51.

Re: claim 13, Spiller's brake system lacks a block being attached to the backing plate by rivets. Yamamoto teaches a block 20 as a first anchor for the webs 62, 52 wherein said first anchor is secured to the backing plate by rivets, as shown in figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention

Art Unit: 3683

was made to have further modified Spiller's brake system to have one common block as a first anchor in order to simplify the design at the same time reducing the cost of making the brake system as taught by Yamamoto.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

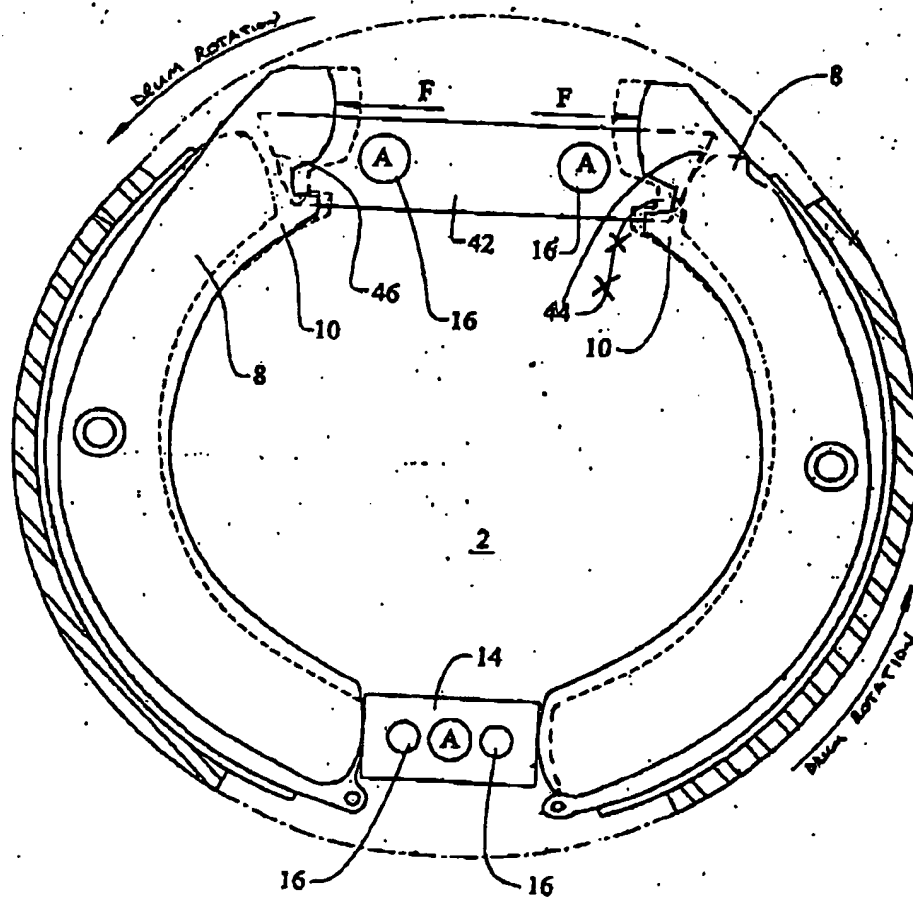
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 6/18/05
XUAN LAN NGUYEN
PRIMARY EXAMINER



Dual Leading-Shoe Drum Brake
Barbosa
U.S. Serial No. 09/986,956.

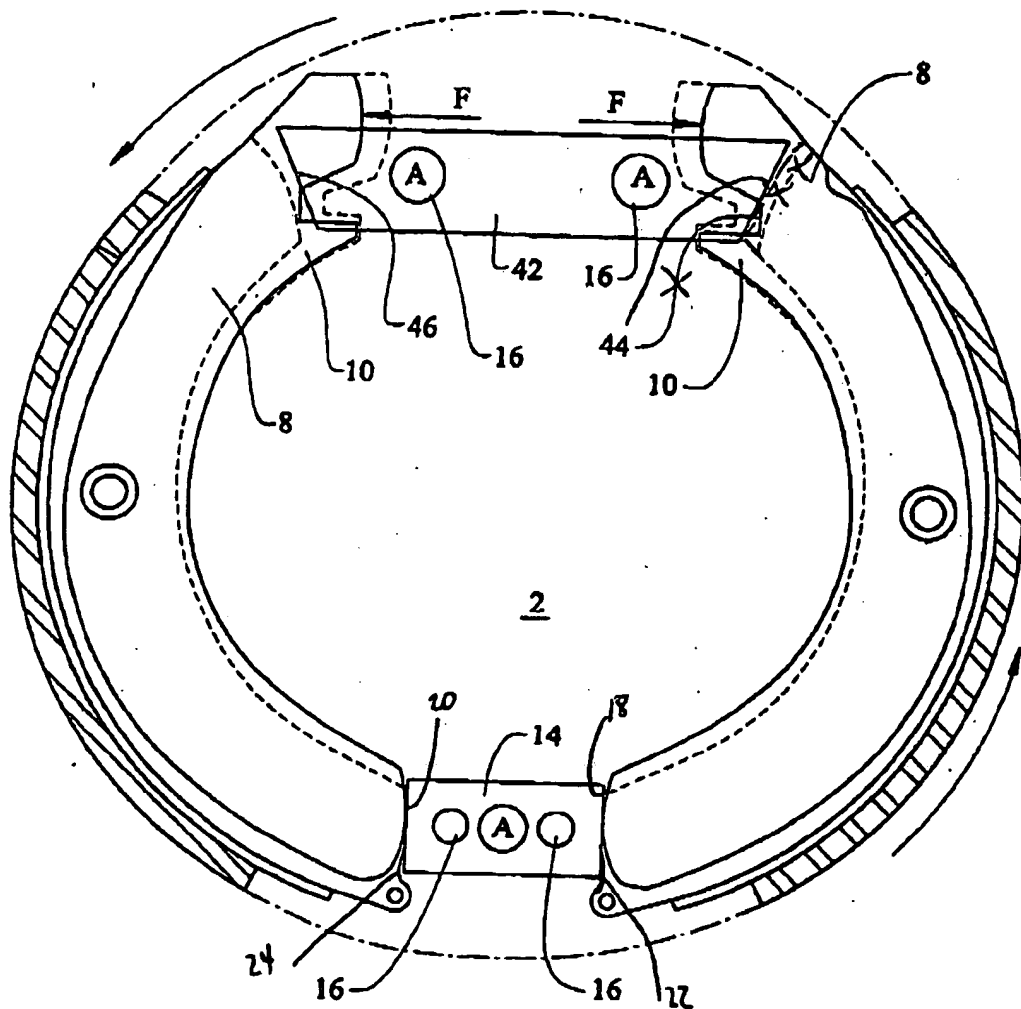
FIG. 2 PROPOSED



NOT approved
XLN
6/18/05

FIG. 2

PROPOSED



NOT approved
6/18/05
XLW